



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/443,233	11/18/1999	JOHN A. HELGENBERG	TN167	6933

7590 07/02/2003

STEVEN B SAMUELS ESQ  
UNISYS CORPORATION  
TOWNSHIP LINE & UNION MEETING ROADS  
BLUE BELL, PA 19424

EXAMINER
----------

ESTREMSKY, GARY WAYNE

ART UNIT	PAPER NUMBER
----------	--------------

3677

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/443,233

Applicant(s)

Helgenberg

Examiner

Estremsky

Art Unit

3677



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on amdt filed and RCE filed 5/30/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8, 14, 15, 19, and 22-26 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 14, 15, 19, and 22-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

Art Unit: 3677

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “plurality of,..., studs” and “plurality of torroidal radial springs”, etc of claim 19 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 14, 15, and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As regards claim 14, there does not appear to be any structure recited to support functional recitation of “and thereby maintaining said predetermined gap between said structures”. The plain meaning of the claim language as a whole would indicate that the “inner surface”,

Art Unit: 3677

“maximum diameter”, etc. (described in the same clause) provide for capability to perform the function but review of the original disclosure indicates that other distinct structure is required. Since the limitation cannot be given weight in accordance with 35 USC, 6th paragraph (see MPEP 2181-2185), the claim seems to be missing elements and/or otherwise confusing as to what structure is included in the claimed invention.

As regards claim 26, the written specification does not use the term “means for releasably engaging and disengaging,...” whereby it is not clear what structure should be covered by the limitation. The examiner notes that specific structure has been disclosed with respect to the embodiments illustrated in Fig’s 1B and 1C in particular, but that structure is for ‘disengaging’ only. Clarification and/or amendment is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 6-8, 14, 19, 22, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 4,678,210 to Balsells.

Balsells ‘210 teaches Applicant’s claim limitations including : a “stud” - including 44,20,24 and balance of stud left of those portions, a “first one of said structures” - 12 as shown in Fig 1

Art Unit: 3677

and/or one of the structures such as laboratory equipment described beginning col 1 of the written description, a “resilient member” - 16 - as shown in Fig 1, “adjacent a surface. Of a second one of said structures” - 10. One of ordinary skill in the art would recognize that the arrangement disclosed by the reference is inherently capable of performing the balance of functional recitations of the claim (see MPEP 2114) where examiner points out that the structure and arrangement of the prior art device is generally the same as that disclosed by Applicant.

As regards claim 14, although no particular structure seems to be defined as regards functional recitation of a ‘predetermined gap’, the reference illustrates a ‘gap’ between parts 10, and 12 on the right side as shown in Fig 2.

As regards claim 26, the structure of the reference is nearly identical to the structure disclosed by Applicant in Fig. 1A for releasably disengaging said stud and said torroidal spring. The examiner notes that the embodiment of the invention illustrated in Fig 1A has been elected for prosecution and also notes that does not prevent consideration of generic claims (possible such as this one) but does limit consideration of claims amended to include specific features of the non-elected embodiments at least until such time that generic claims are found to contain allowable subject matter.

6. Claims 1-8, 14, 19, and 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,639,113 to Goss.

Art Unit: 3677

Goss '113 teaches Applicant's claim limitations including : a "stud" - 12, "extending outwardly from one of said structures" - from 1, "having an outer surface oriented at an angle to said axis" - as shown on the face of the patent, a "resilient member" - 28, "positioned adjacent a surface of the other one of said structures" - as shown in Fig 5 for example, "torroidal configuration" - as shown.

As shown in Fig 8 for example, the resilient member (28) is engaging an outer surface of said stud. One of ordinary skill in the art would recognize that the gap between the stud and part 14 as viewed in Fig 8 for example is large enough to permit entry of any of various tools that can be used to compress the resilient member and allow release of the stud whereby the structure of the reference is *inherently* "releasable" or 'capable of being released'. Inasmuch as this is a product claim, defined by its structure and not a 'process of using'; there is no requirement that an anticipatory reference teach steps in some intended use of the product.

Inasmuch as a *capability* is recited and not any particular structure, the limitation is broad.

There is no indication that any structure is claimed in accordance with 35 USC 112, 6th paragraph that might be relied upon to patentability define from structure of the reference. See MPEP 2181-2185.

Claims in a pending application should be given their broadest reasonable interpretation. In re Pearson, 181 USPQ 641 (CCPA 1974). It is the examiner's position that the reference teaches all claim limitations. The law of anticipation requires that a distinction be made between the invention described or taught and the invention claimed. It does not require that the reference

Art Unit: 3677

"teach" what the subject patent teaches. Assuming that a reference is properly "prior art," it is only necessary that the claims under consideration "read on" something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or "fully met" by it. *Kalman v. Kimberly-Clark Corp.*, 218 USPQ 789.

As regards claim 4, since the various functional recitations aren't exclusively related to a single position of the claimed elements, the structural elements of the reference reads directly on all limitations as shown in Fig's 6-8.

As regards claim 8, part 28 inherently has spring properties in the radial directions and reads on broad limitation of "radial spring". Claims in a pending application should be given their broadest reasonable interpretation. In re Pearson, 181 USPQ 641 (CCPA 1974). Accordingly, it is suggested that the limitation be amended as --a coiled metal spring with its central axis arranged in a circle to form said torroidal configuration--.

As regards claims 24 and 25, Goss '113 discloses the stud to be mounted on the "door" (1) where parts including 22 read on broad limitation of "frame".

7. Claims 1-8, 14, 15, and 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,154,308 to Larson.

Larson '308 teaches Applicant's claim limitations including: a "stud" - including 80,86, "extending outwardly from a first one of said structures" - including 18,40, a "resilient member" - 109, "second structure" - including 22,96.

Art Unit: 3677

As regards claim 4, parts including 18,40 read on broad limitation of “door”.

As regards claim 15, as shown in Fig 3, the “stud” is mounted on the “frame” (including part 50) and the “radial spring” (109) is “mounted on the door” (18) “adjacent a surface of the door”, where ‘adjacent’ is broad and does not require contact.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat.

No. 4,678,210 to Balsells.

Although the reference doesn’t explicitly use the term “frame” in description of laboratory equipment, present use of that term in the claim is not accompanied by any further structural definition that would prevent the limitation from being read on support, bracket structures or rigid tubing, glass titration equipment, etc. all long known for their use as laboratory equipment. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a frame used in laboratory equipment with a stud as taught by Balsells ‘210 in order to allow other laboratory equipment to be easily attached and detached as described in the written description of the reference.

Art Unit: 3677

10. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,639,113 to Goss.

Although Goss '113 discloses the stud to be mounted on the "door" (1), it would have been an obvious design choice or engineering expedient for one of ordinary skill in the art to simply reverse the parts, mounting stud (1) on part 3 and provide the opening or the stud on part 1 since it would not affect the function of the device and it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167. Whether or not the stud is mounted on part 1 or 3, of the reference, limitation of "radial spring positioned adjacent a surface of said door" is broad since the term "adjacent" is broad and does not require direct contact or specify any particular distance, etc..

The proposed modification does not otherwise affect the function of the device and would be recognized by one of ordinary skill in the art as being equivalent for those reasons. Furthermore one of ordinary skill in the art would have more than a reasonable expectation of success, especially considering the high level of skill in the art which includes degreed engineers with extensive knowledge of prior art, manufacturing, structural analysis and materials science. See MPEP 2144.04, section VI. The examiner notes there does not appear to be any 'criticality' of position on one, and not the other structure.

Art Unit: 3677

***Response to Arguments***

11. Applicant's arguments with respect to the pending claims have been considered but are not persuasive and/or are moot in view of the new ground(s) of rejection.

As regards 102 rejection in view of Goss '113, Applicant's arguments that the reference does not explicitly illustrate realization of functionally-recited capabilities set forth in the claim is not persuasive. The claimed invention does not include an arrangement where those capabilities are realized, or positively recited as structure.

The 'configured to' limitation must be treated essentially as a 'capability' or 'adapted to' limitation since it does not define any particular structure. The explicitly-disclosed gap between the structures would inherently allow a tool to be inserted for manipulating the resilient member and releasing the structures. One of ordinary skill in the art would recognize that capability. The "releasable" limitation is broad, and contrary to Applicant's arguments, has not defined over the inherent features of the prior art for the reasons noted. The present limitation does not define any structure which can be relied upon to patentably distinguish from the prior art.

The structure of the reference includes an torroidal spring element that can inherently be held in place so as to contact the stud as its central opening is expanded as the stud is forced out. The examiner is not proposing obviousness of any modification with respect to teaching such capability. No modification is required since the limitation is phrased as a 'capability' where one of ordinary skill in the art would recognize that the structure is inherently capable of such use whether or not such use is intended. No structure is defined by the limitation that can be relied

Art Unit: 3677

upon to patentably define from the structure of the reference. It has been held that the recitation that an element is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. The examiner comprehends that the torroidal member is intended to retain the structures but that does not negate the fact that it is inherently 'capable of' being assembled and disassembled in a manner that teaches broadly-recited functional limitations. Would one of ordinary skill in the art concede that it is impossible for the structure of the reference to be assembled and/or disassembled in such manner.

Applicant argues that the references don't teach steps in a *process of using* but this is a *product* claim. See MPEP 2173.05 (p) sections I and II as regards a single claim for *product* and *process of using*. Such claims are indefinite and non-statutory. Otherwise see MPEP 2114 as regards proper interpretation of functional language.

It is suggested that the substantial difference between the scope and meaning (and accordingly, consideration of prior art teachings) of steps in a process of using and the scope and meaning of functionally-recited capabilities in a product claim be considered. In that respect, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Persuasive argument should point out structure in the claimed product that is not taught by the prior art.

Similar considerations apply to the Larson '308 reference.

Art Unit: 3677

As previously noted, the scope of the present claims has been carefully examined and is considered broad in view of the prior art which teaches the broad structural limitations of 'door', 'frame', 'stud' and 'resilient member' used for releasable engagement. Any further structural limitations for these elements are broad and/or lacking whereby reasonable interpretation might include many diverse well known 'systems for engagement'. For example, limitation of substantially torroidal resilient member might be read on well known rubber O-rings used to obtain a releasable engagement between two structures.

Reliance on functional recitations to patentably distinguish in this crowded art is misplaced. While functional language can be used to further define a claimed element, the result may be open to broad interpretation since actual structure is not defined. Inasmuch as Applicant seeks exclusive rights to the claimed invention, it seems reasonable to expect the product claims to define structure of that product that patentably distinguishes the present invention from structure of products that are old and well known in the art.

Lastly regarding functional language, it is noted that (with exception of claim 26) present functional recitations should not be confused or otherwise interpreted as covering disclosed structure in accordance with 35 USC 112, 6th paragraph. See MPEP 2181-2185. To the contrary, claims in a pending application should be given their broadest reasonable interpretation. In re Pearson, 181 USPQ 641 (CCPA 1974). The law of anticipation requires that a distinction be made between the invention described or taught and the invention claimed. It does not require that the reference "teach" what the subject patent teaches. Assuming that a reference is properly

Art Unit: 3677

"prior art," it is only necessary that the claims under consideration "read on" something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or "fully met" by it.

*Kalman v. Kimberly-Clark Corp.*, 218 USPQ 789.

As regards prima facie case of obviousness in view of Goss '113, the examiner has relied upon the teachings of the reference, knowledge of those of ordinary skill in the art, and explicit direction of MPEP 2144.04 in establishing a prima facie case for obviousness in recognition of applicable case law that is consistent with Office policy. Applicant's arguments neglect explicit direction provided by MPEP. Applicant's argument for criticality is not persuasive where the claims do not include a release mechanism positioned as argued. Since the claims must be given their broadest reasonable interpretation, the claimed invention does not necessarily include features not claimed, and reversal of prior art bolt and keeper with respect to door and frame is long known in the art of latches. It is suggested that limitations defining the particular arrangement of the release mechanism with respect to the door and frame be added to the claims if that arrangement is critical to the present inventive concept. It is suggested that the door and frame structures be added to other of the independent claims in view of the Balsells '210 reference among others.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 3677

- a. U.S. Pat. No. 3,596,867 to Allander.
- b. U.S. Pat. No. 4,805,272 to Yamaguchi.

13. Submission of any response by facsimile transmission is encouraged. Group 3677's relevant facsimile numbers are :

- 703-872-9326, for formal communications for entry **before Final** action: or
- 703-872-9327, for formal communications for entry **after Final** action.

Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly within our examining group and will eliminate Post Office processing and delivery time and will bypass the PTO's mail room processing and delivery time. For a complete list of correspondence **not** permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a Deposit Account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check **should not be** submitted by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) \_\_\_\_ - \_\_\_\_ ) on \_\_\_\_\_  
(Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_

\_\_\_\_\_  
(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do

Art Unit: 3677

not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary Estremsky whose telephone number is (703) 308 - 0494. The examiner can normally be reached on M - Th from 730 am to 600 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann, can be reached on (703) 306-4115.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

- Technology Center 3600 Customer Service is available at 703-308-1113.
- General Customer Service numbers are at 800-786-9199 or 703-308-9000.

GWE

June 25, 2003



GARY ESTREMSKY  
PRIMARY EXAMINER